ABSTRACT

A strategy for semiautomatic sequencing of argentinated (silver-containing) oligopeptides is described. The method of sequencing described is based on a search algorithm that identifies a triplet peak relationship in a product ion spectrum of the [M + Ag]+ ion of an oligopeptide. The ions that constitute a triplet are $[b_n + OH + Ag]^+$, $[b_n - OH + Ag]^+$ $\mathrm{H}+\mathrm{Ag}]^+$, and $[\mathrm{a}_n$ - $\mathrm{H}+\mathrm{Ag}]^+$, which are separated by 18 and 28 m/z units, respectively. The difference in the m/z values of adjacent triplets identifies the residue that is "cleaved". Observation of the $[y_n + H + Ag]^+$ ion containing the cleaved residue confirms the assignment.

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